How to cite this article in bibliographies / References

H Gil de Zúñiga, A Ardèvol-Abreu, T Diehl, M Gómez Patiño, J H Liu (2019): "Trust in Institutional Actors across 22 Countries Examining Political, Science, and Media Trust Around the World". *Revista Latina de Comunicación Social*, 74, pp. 237 to 262.
http://www.revistalatinacs.org/074paper/1329/12en.html
DOI: 10.4185/RLCS-2019-1329en

Trust in Institutional Actors across 22 Countries. Examining Political, Science, and Media Trust Around the World

Homero Gil de Zúñiga [CV] [GS] [ORCID] Department of Communication, Media Innovation Lab. University of Vienna, Austria. homero.gil.de.zuniga@univie.ac.at

Alberto Ardèvol-Abreu [CV] [GS] [ORCID] Departamento de Psicología Cognitiva, Social y Organizacional. Universidad de La Laguna, España. aardevol@ull.es

Trevor Diehl [CV] [GS] [ORCID] Department of Broadcast and Cinematic Arts. Central Michigan University, Estados Unidos. diehl1th@cmich.edu

María Gómez Patiño [CV] [GS] [ORCID] Departamento de Lingüística General e Hispánica. Universidad de Zaragoza, España. mariagp@unizar.es

James H. Liu [CV] [GS] [ORCID] Centre for Applied Cross-Cultural Research. Massey University, Nueva Zelanda. j.h.liu@massey.ac.nz

Abstract
Social trust has long attracted the interest of researchers across different disciplines. Most of previous studies rely on single-country data and consider only one dimension of social trust at a time (e.g., trust in science, the media or political institutions). This research extends a framework developed by the Global Trust Inventory (GTI) by discussing several dimensions of social trust, while simultaneously analyzing how trust in institutions varies across societies. Drawing on an online panel survey collected in 22 countries (N = 22,033), we examine cross-country differences in social trust—including government trust, trust in governing bodies, security, and knowledge producers. Additionally, this paper fills a gap in current literature by including a measure of trust in the media. Findings are discussed in the context of comparing emerging and developed countries based on the Human Development Index.

Keywords
Cross-cultural, political trust, trust in the media, trust in science, social trust, trust in institutional actors.

Contents

Writen in English by_the Authors

1. Introduction

As societies become more democratized, persuasion tends to replace coercion whenever possible, and trust becomes a key element in almost every sphere of public life (Levi, 1998). Without a certain amount of political trust, citizens will not empower their governments through elections and participation, the media will not perform as 'watchdog' for the public's interest, and scientists will not be provided with the resources they require to produce and disseminate, knowledge. Broadly defined, trust is the favorable expectation an individual hold about the positive outcomes when interacting with another individual, group, or institution (Coleman, 1990; Tsfati, 2003). Trust is a prerequisite for basic human interactions, including partnership and marriage, patient-health care provider relationships, or economic exchanges (Harris, Skogrand, & Hatch, 2008; Lorenz, 1999; Luhmann, 2000; Tsfati & Cappella, 2003).

Over the last decades, trust has attracted the interest of scholars across many disciplines. Research revolving trust is therefore extensive and comprises many different areas and dimensions. Thus, political trust (Boix & Svolik, 2013; Catterberg & Moreno, 2005; Cook & Gronke, 2005); trust in science and knowledge producers (Achterber, de Koster, & van der Waal, 2015; Allum, Sturgis, Tabourazi, & Brunton-Smith, 2008; Aupers, 2012); and trust in the media (Hovland & Weiss, 1951; Kohring & Matthes, 2007; Tsfati & Capella, 2003) are all sub-dimensions of trust of particular interest to social and political science researchers. However, most of previous studies rely on single-country data (most often in the United States and a few other Western democracies) and examine one—or maximum two—dimensions of trust at a time. This purpose of this paper is to: a) examine several dimensions of social trust, and b) move beyond single-country studies to simultaneously analyze how these different sub-dimensions vary in different societies. We do so by adopting a more comprehensive framework of trust that includes 'institutional actors,' organizations whose work involves producing information, services and rules (i.e., institutional products) that will affect the rest of actors in the society (Furusten, 2013). Drawing from 4 factors identified by the Global Trust Inventory (Liu, Milojev, Gil de Zúñiga, & Zhang, 2018)—trust in government, trust in governing bodies, trust in security institutions, and trust in knowledge producers—, as well as a measure of trust in the media, we analyze the results of a large data set collected in 22 societies (N = 22,033). We found important differences in levels of social trust among societies, uncovering certain patterns and clustering according to the stage of social development of the countries, measured through the Human Development Index (HDI) [1].

2. Literature review

2.1. Political Trust: Specific and Diffuse Support

Traditionally, scholars have defined political trust as a basic evaluative orientation toward the government, based on the match between people's expectations and subsequent perceptions of performance (Hetherington, 1998; Miller, 1974). From a normative perspective, a well-functioning democracy requires a certain level of political trust, since it legitimates the acts of governing institutions and allows for more effective governance with lower levels of coercion (Gamson, 1968; Hetherington, 1998; Levy, 1998). However, discrepancies about the dimensionality, measurement, antecedents, and effects of political (dis)trust still persist.

Political trust taps into feelings towards the government as a whole, so that "it likely affects assessments of the government's component parts, namely, incumbent and institutions, at the same time" (Hetherington, 1998, p. 791). This double orientation of political trust (toward incumbents—*specific support*— and toward the political system and institutions —*diffuse support*—) is crucial to properly assess the implications of the generalized drop in levels of social trust around the world in the last decades (Bennet, Rhine, Flickinger, & Bennet, 1999; Catterberg & Moreno, 2005; Easton, 1965; Hetherington, 1998). On the one hand, a steady *diffuse support* decline may be viewed as an indicator of political alienation with potential to deter people from public participation (Miller, 1974; Putnam, 2000; 2002). On the other, eroded *specific support* may suggest the emergence of a more critical and politically sophisticated citizenry that would maintain a 'vigilant skepticism' (Cook & Gronke, 2005; Hardin, 1999).

Correlates of political trust found in previous studies—both at the micro and macro levels—lend support to the theoretical and empirical complexity of this construct. Thus, individual well-being, social capital, political interest, external efficacy, country's economic situation, and level of congressional/ presidential approval are positive predictors of political trust (Citrin & Green, 1986; Hetherington, 1999; Catterberg & Moreno, 2006). Conversely, political radicalism, post-materialism, and corruption permissiveness are negatively related to political trust (Catterberg & Moreno, 2006).

Some studies have explored political trust cross-culturally using survey data from different countries with different levels of democratic consolidation (Catterberg & Moreno, 2006). Consistently with 'cultural theories' (Citrin, 1974; Ulsaner, 2002), the relationship between democratic development and political trust has been found to be curvilinear in nature. That is, the arrival of democracy is typically characterized by increased levels of political trust, which tend to decline again after some decades of citizens' unmet expectations. According to Catterberg and Moreno, this 'post-honeymoon' disillusionment period results from the fact that "aspirations of civic, political, and economic rights" are not achieved in many cases, resulting in citizens' skepticism (2006, p. 33). In highly developed societies, however, relatively low levels of political trust are explained by 'post-materialistic' values and citizens' increased performance demands (Catterberg & Moreno, 2006; Inglehart, 1997).

2.2. Trust in Scientific Institutions

Attitudes of trust towards knowledge producers, or towards science in general, have been an area of increasing academic interest since the early eighties, particularly in the U.S. and Great Britain (Evans & Durant, 1989; Miller, 1983; Ziman, 1991). Perhaps one of the most noteworthy of these attempts is the successive European Union's *Eurobarometer* series (in 1989, 1992, 2001, and 2005) focused on 'public understanding of science' (Pardo & Calvo, 2002). These measures—and subsequent studies based on them—have however met with some criticism based of the "lack of theory" in the formulation

and selection of the items and the low reliability and internal consistency of the attitudinal scales (Pardo & Calvo, 2002, p. 167)

Comparative studies based on survey data suggest that knowledge producers have not been entirely immune to the negative trends in the public's level of social trust (Allum et al., 2008; Aupers, 2012; Inglehart, 1997). While the majority of the population tends to support science and scientific research, some societies have experienced growing distrust in "scientific authorities, the knowledge they produce and the (technical) solutions they propose" (Aupers, 2012, p. 26). Existing research in this area is however limited to only a handful of western democracies, and it would be therefore necessary to extend these analyses to other societies, particularly in "Africa, Asia and the middle east" (Allum *et al.*, 2008, p. 52).

When considering science, scientific *principles and methods*, on the one hand, and scientific *institutions* (including scientists), on the other, are assessed differently (Achterberg *et al*., 2015). According to this strand of research, only *scientific institutions*, and not *scientific principles and methods*, would be facing a crisis of confidence (Achterberg *et al.*, 2014; Millstone & Zwanenberg, 2000). For this reason, in this paper we only consider the institutional dimension of science. By doing so, we answer the call made by Bauer *et al*. (1994) for further research to explore public perceptions of this specific dimension of science.

2.3. Trust in the Media

News media are a main source of information about the political and social world. In democratic contexts, individuals and societies place their trust in the media with the expectation that they will serve as a *watchdo*g for the public interest (Dyck & Zingales, 2002; Habermas, 1989). The media are not only entrusted with specific tasks such as filtering, selecting, and communicating 'objective,' 'bias-free' information, but they are also expected to contribute to democratic stability by fostering deliberation, negotiation, and collective decision-making (Farnsworth & Lichter, 2007; Schudson, 1978).

Because of these important links between media, public opinion, and democracy, trust in the media—and the related concept of media credibility—has received the attention from sociology and communication researchers since the 1950s. Throughout these seven decades of studies on the topic, researchers have found a variety of effects of (dis)trust in news media. Thus, the level of trust in the source of information is directly related to the persuasive power of messages, and mediates both agenda-setting and priming effects (Druckman, 2001; Miller & Krosnick, 2000). At a behavioral level, (dis)trust in the media has been found to affect media consumption patterns, since audiences tend to get information from sources they trust and to avoid exposure to sources they do not consider reliable (Ardèvol-Abreu & Gil de Zúñiga, 2016; Tsfati & Cappella, 2003).

Despite the considerable progress made in the understanding of media trust over the past decades, important conceptual and methodological gaps persist. First, as Kohring and Matthes (2007) have pointed out, we still lack an explicit and comprehensive theory of trust in the media, which results in different and sometimes inconsistent measures of the construct. Second, research on media trust originates almost entirely on the United States, so that we lack a cross-country perspective (Tsfati & Ariely, 2014). Previous findings on media trust are thus hardly amenable to generalization to other democratic societies, let alone non-democratic contexts. This study is designed to fill some of these gaps by relying on a cross-national exploration of trust in the news media.

3. Research Question

The objective of this study is twofold. First, it is aimed at 'grasping together' (Sibley & Liu, 2013) different types of social trust to help theorize trust as a global system of meaning (Liu et al., 2018). Also, we investigate possible differences in the level of trust in institutional actors across countries. Based on the literature reviewed above, and in the light of these objectives, we ask a research question:

RQ: What are the levels of trust in different institutional actors —trust in government, trust in governing bodies, trust in security institutions, trust in knowledge producers (e.g., science), and trust in the media— across different societies?

4. Methods

4.1. Sample

Data for this study comes from an online panel survey collected in 22 countries from the Americas, Asia, Europe and South Africa. The survey is a part of an international project conducted by a partnership between research groups based in Europe and New Zealand. Items were translated for each country by a large group of participating scholars, employing either back-translation with a team approach (Behling & Law, 2000; Thato, Hanna, & Rodcumdee, 2005) or the committee approach (Brislin, 1980). Survey administration was performed from September 14-24, 2015. AC Nielsen curated a massive pool of potential respondents across 22 countries – over 10 million. Nielsen used stratified quota sampling techniques to create samples whose demographics closely matched those reported by official census agencies (Callegaro et al., 2014) [**2**].

The largest sample size was collected in Brazil (N = 1,224), and the smallest in India (N = 409) as it's only representative of New Delhi; (mean sample size, for all countries: M =1,136*;* SD = 238). Overall cooperation rate was relatively high, averaging 77% across the panel (AAPOR, 2011; CR3). Since Nielsen partners with companies that employ a combination of panel and probability-based sampling methods, the limitations of web-only survey designs are minimized (AAPOR, 2011; Bosnjak, Das, & Lynn, 2016; see Appendix for details).

4.2. Measures

Trust in government: This measure attempted to capture information about respondents' 'specific support' for incumbents; different from the broader regime-based 'diffuse support' (Miller, 1974; Putnam, 2000; 2002). Building on the World Values Survey and other previous approaches (Bennett et al., 1999; Catterberg & Moreno, 2006; Citrin, 1974), trust in government was measured with three items, based on responses to the following prompt: "Please rate your feelings of trust towards the following people and organizations, where 1 = do not trust at all, and 7 = trust completely: 'national government;' 'local government;' and 'your president or prime minister' (Cronbach's α = .87; M = 2.19; SD = 1.08; Table 3 for a detailed breakdown by country).

Trust in governing bodies: This variable taps respondents' more general attitudes toward the political regime, or their *diffuse support* for the system, irrespective of whether they trust current rulers or not (Cook & Gronke, 2005; Hardin, 1999). This index included four items concerning respondents' level of trust towards the following actors: 'the judiciary (courts),' 'government surveillance agencies,' 'the tax system,' and 'election outcomes in your country' (Cronbach's α = .84; M =3.21; SD = 1.41; Table 3).

Trust in security institutions: Similar to trust in governing bodies, this dimension of social trust also relates to the public's attitudes toward regime-level institutions —and therefore to *diffuse support* (Hetherington, 1998; Liu et al., 2018). Respondents were provided the same prompt as for *trust in government*, and they rated their feelings of trust towards 'police' and 'the military in your country' (Cronbach's α = .74; *M* = 3.84; *SD* = 1.54; Table 3).

Trust in knowledge producers. Using the same prompt, trust in knowledge producers was measured with an index based on the respondents' feelings of trust towards 'scientists' and 'universities' (2 items averaged scale, Cronbach's α = .87 *M* =4.43, *SD* = 1.42; Table 3).

Trust in the media. Building in previous measures (Jackob, 2010; Jones, 2004; Moy, McCluskey, McCoy, & Spratt, 2004), media trust was measured with a three-item scale. Respondents were asked about their feelings of trust towards 'news from mainstream news media (e.g., newspapers, TV);' 'news from alternative news media (e.g., blogs, citizen journalism);' and 'news from social media' (Cronbach's α = .77; *M* =3.51; *SD* = 1.12; Table 3).

4.3. Analysis

Based on a previously introduced model of social trust, Global Trust Inventory (Liu, et al., 2018), we combined the 14 items of social trust into additive, averaged item indices—as described in the methods section—to gather descriptive statistics (Table 3). Reliability testing was performed on each construct (Cronbach's α scale testing for multi-item indices, KR-20 parallel testing for the two-item indexes). We then compared the mean score on each construct using *t-tests* against the overall mean score for all countries, what we call the 'grand mean' (Table 4). Further, we employed post-hoc ANOVA tests, using the Bonferroni procedure, to test differences between each country (Table 4 and Table 5). Results are reported in clusters of countries based on the United Nations Human Development Index (HDI) (Tables 2, 3, 4, and 5). Clusters analysis creates groups of countries that shown similar pattern of response to a variable of interest, or a set of them (Human Development Index).

5. Results

Tables 2-5 present detailed descriptive statistics (disaggregated by country) for each sub-dimension of trust. Countries were grouped in four clusters based on their Human Development Index[1] (HDI) (United Nations Development Program, 2015), from 'highest' to 'medium' HDI. Two-step cluster analyses based on the Euclidean distance showed that a four-cluster solution was a good fit for the data (average silhouette measure of cohesion and separation = 0.7; ratio of sizes = 2.5). As Table 1 shows, the clusters differ in size, with the larger cluster representing the countries with the 'highest' HDI: Germany, United States, New Zealand, United Kingdom, Korea, Japan, Taiwan, Spain, Italy, and Estonia (*N* = 10, 45.5% of the countries). The second cluster includes four countries (18.2% of the cases) with a 'very high' HDI: Poland, Argentina, Chile, and Russia. Four countries (18.2%) with a 'high' HDI form the third cluster: Turkey, Brazil, Ukraine, and China. Finally, the 'medium HDI' cluster (*N* = 4, 18.2% of the countries) includes Indonesia, Philippines, South Africa, and India.

To further test the internal consistency of the different dimensions of trust across countries, Cronbach's α coefficients were calculated for every sub-dimension of trust in every country. As Table 3 shows, the five sub-dimensions of trust in institutional actors are reasonably consistent across the 22 countries in the sample (alphas range from .59 - .94; Table 3).

5.1. Political trust: trust in government, trust in governing bodies, and trust in security institutions

The first three columns in Tables 2, 3, 4, and 5 show the results for political trust, with some dimensions more connected to trust in specific incumbents (*specific support*, i.e. trust in government) and others more connected to trust in the political system and institutions as a whole (*diffuse support*, i.e. trust in governing bodies and trust in security institutions). Interestingly enough, the average levels of trust across the countries are consistently higher for governing bodies and security institutions (*diffuse support*) than for government (*specific support*). There are however a few exceptions to this pattern: Russia, Ukraine, China, and Indonesia show higher levels of trust in government (M_R = 3.41; M_U = 2.43; M_{Ch} = 4.05; M_I = 3.50, respectively) than in governing bodies (M_R = 3.03; M_U = 2.30; M_{Ch} = 3.63; M_I = 3.31, respectively). On the contrary, security institutions (police and military) score higher than government without any exception (Table 3). This means that, at the aggregate level, people tend to show lower levels of trust in incumbent-level government and personalities than in regime-level institutions—the latter only indirectly linked to the government in office. This finding provides additional support for the theoretical distinction between incumbent and regime-based trust (Bennet et al., 1999; Easton, 1965; Hetherington, 1999).

Government trust ranged between 1.88 (Brazil, slightly below 2 = 'trust a little') and 4.93 (India, 5 = 'trust significantly'). For their part, the levels of trust in governing bodies were between a minimum of 2.30 (in Ukraine) and maximum of 5.03 (again, in India). Similarly, trust in security institutions reaches its highest level in India (5.25) and its lowest value in South Africa (2.85) (Tables 2 and 3). Table 4 shows detailed *t-tests* for single-country differences with the grand mean (government trust, M = 2.92; trust in governing bodies, M = 3.21; trust in security institutions, M = 3.84). Estonia, Russia, China, and India showed the higher levels of trust in government within their respective clusters; while Spain, Poland, Brazil, and South Africa scored the lowest within their groups (Tables 4; Table 5). Similarly, Estonia, Russia, China, and India peaked in trust in governing bodies within their clusters, while Taiwan, Argentina, Ukraine, and South Africa scored significantly lower than the rest of the countries in their clusters. Concerning the third sub-dimension of political trust—trust in security institutions—, maximum values within clusters were found in Estonia, Chile, Turkey, and India. Conversely, Taiwan, Argentina, Brazil, and South Africa showed the lowest levels of trust in police and the military within clusters.

Overall, results suggest a non-linear relationship between levels of human development and political trust (including government, governing bodies, and security institutions). As shown in Table 1, and considering clusters of countries, average levels of political trust (government, governing bodies, and security institutions) are relatively high at each end of the HDI (i.e., clusters 1 and 4). Thus, respondents living in countries with the 'highest' (cluster 1) or a 'medium' (cluster 4) HDI tend to trust more their government and institutions, compared to respondents from countries in clusters 2 and 3 (with a 'very high' and 'high' HDI).

5.2. Trust in knowledge producers

Concerning cross-country differences in trust in scientists and universities, the mean values ranged from 3.41 (Taiwan. above 3 = 'trust in some ways,' and below 4 = 'trust moderately') to 5.60 (India, above 5 = 'trust significantly,' and below 6 = trust a lot) (Tables 2 and 3). Note that, as with trust in the media (below), Taiwan and India obtained the lowest and highest mean values for trust in knowledge producers, respectively (Table 4 for more detailed comparisons with the 'grand mean,' M = 4.43). Between-group differences within clusters are also significant for science trust (Tables 4 and

5). Thus, the mean levels of trust in knowledge producers in Estonia (*M* = 5.06, significantly higher than the rest of countries grouped in first cluster but New Zealand), Argentina (*M* = 5.11), Turkey (*M* = 4.72) and India (*M* = 5.60) peaked in their respective clusters. On the contrary, mean levels of trust in scientists and universities in Taiwan (*M* = 3.41), Poland (*M* = 4.14), Brazil (*M* = 4.27, significantly lower than the rest of countries within the third cluster but China), and South Africa (*M* = 4.10) were found to be the lowest within their respective clusters. Trust in knowledge producers is inversely related to the HDI at the aggregate level, showing a maximum value (*M* = 4.72) for the fourth cluster (lower HDI) and a minimum (*M* = 4.32) for the cluster of 'highest' HDI countries (Table 1).

5.3. Trust in the media

Trust in the media ranged from 2.63 (Taiwan) (between 2 = 'trust a little,' and 3 = 'trust in some ways') to 5.13 (India) (above 5 = 'trust significantly'). Table 4 shows more detailed results at the country level, specifying countries that scored above or below the 'grand mean' (*M* = 3.51). *Post-hoc* ANOVA comparisons (Tables 4 and 5) show significant between-groups differences within clusters. The minimum scores within clusters (significantly lower than any other country within their respective clusters) were found for Taiwan (*M* = 2.63), Poland (*M* =3.40), and South Africa (*M* = 3.54). At the other end of the index, Chile (*M* = 3.86) and India (*M* = 5.13) showed the higher levels of media trust within clusters. Table 1 compares aggregated values of trust between clusters. Similar to trust in knowledge producers, media trust reaches a maximum (*M* = 4.14) in the fourth cluster, formed by those countries with a lower HDI. At the opposite end, the cluster including those countries with a higher HDI scores the lowest in trust in the media (*M* = 3.33). These figures are also suggestive of an inverse association between HDI and media trust.

6. Discussion and conclusion

In this overview, we summarize past research from different fields and perspectives, fostering the ground for a multidimensional, internationally valid measurement of trust in institutional actors. Thus, this study employed a five-dimensional model of trust in institutional actors. Our approach is in line with concerns raised about the double orientation of political trust: a) toward the incumbents and their current policy-making (*specific* support), and b) toward other more stable institutions and elements of the political regime (*diffuse* support) (Bennet et al., 1999; Easton, 1965; Hetherington, 1999). In other words, citizens' attitudes toward politics —and, more specifically, their levels of political trust— cannot be studied as a homogeneous block. When asked about their levels of political trust, people tend to clearly distinguish between the government and leaders in power (*specific* support) and other more 'incumbent independent' institutions (the judiciary, military, or surveillance agencies) (*diffuse* support). In our sample, the levels of *diffuse* support are consistently higher than the levels of *specific* support across countries. It should be noted that our proposed five-dimensional model of social trust works reasonably well in nearly all countries of the sample. Cronbach's alphas for all sub-dimensions are acceptable (and sometimes good or excellent) across countries, with very few exceptions.

Overall, knowledge producers (scientific institutions and scientists) are the most trusted actors across societies. Although some studies have called attention to declining levels of trust in science (for example, Allum *et al*., 2008; Aupers, 2012), our findings indicate that people tend to particularly trust in science, even when asking specifically about scientific *institutions* and not about scientific *principles and methods* (see Achterberg et al., 2015). Without exceptions, respondents rate universities and scientists as the most trustable institutional actors, with figures above 4 (trust moderately) in most countries, and even above 5 (trust significantly) in some of them (Italy, Estonia, Argentina, and India). On the other end of the spectrum, government is often the least trusted social actor, ranking below

governing bodies, security institutions, and the media. This finding is however inconsistent across societies and in some of the most populated countries in our sample (United States, Russia, and China) people trust more the government than the media (the least trusted institution in United States and Russia). From a normative perspective, these results should be viewed with some concern. In democratic societies, the media are entrusted with the responsibility of serving as a *watchdog* for the public interest and to scrutinize the movements of all three branches of government (executive, legislative, and judicative). A media system in which citizens do not place their trust in will be hardly able to watch over any authority or institution.

Consistent with previous theories and findings (Catterberg & Moreno, 2006; Inglehart, 1997), our results suggest that both cultural and institutional explanations may lie behind the different levels of social trust across societies. Cultural theories argue that advanced societies have witnessed the emergence of 'post-materialist' values, according to which citizens place greater demands on government and institutions (Inglehart, 1997). Post-materialists "place less emphasis on economic growth and more emphasis on the non-economic quality of life" (Inglehart, 1997, p. 375), resulting in loss of respect for authority and social trust (Tsfati & Ariely, 2014). However, these losses in social trust are not necessarily negative, since they may be suggestive of the emergence of a 'vigilant skepticism' by a more critical and politically sophisticated citizenry (Cook & Gronke, 2005; Hardin, 1999). In line with these ideas, our study shows that countries with lower HDI tend to score relatively high in all dimensions of social trust. Conversely, countries with a higher HDI show relatively lower levels of social trust.

Nonetheless, this pattern is not perfect, and results suggest that variables at the macro level—other than post-materialist values—drive social trust patterns in these data. Thus, political trust (including trust in government, governing bodies, and trust in security institutions) tends to show higher values in countries in the first cluster than in those in the second and third cluster. One complementary explanation for this could be the so-called 'post-honeymoon' effect (Catterberg & Moreno, 2006). While the arrival of democracy usually results in enhanced levels of social trust (especially trust in government), this trend commonly reverses after some years or decades of citizens' unmet expectations. In many cases, social and political institutions are not in a position to meet the tremendous expectations of citizens regarding civic, political, and economic rights, resulting in lower levels of social trust (Catterberg & Moreno, 2006). Thus, performance of social institutions, and not only cultural values, do matter in explaining cross-country differences in trust in institutional actors.

The findings of this study have to be interpreted with caution due to a number of caveats and limitations to consider. First, we focused on the development of a multi-dimensional model of social trust and thus we did not include any predictor or outcome variable. Therefore, our assessments about the role of 'post-materialist values' or 'post-honeymoon effects' are only post-hoc speculations. Further studies should use our proposed scale of social trust to better explore its antecedents and outcomes both at the micro and macro levels. To this end, future research should conduct multi-level analyses considering not only individual attributes (demographics, sociopolitical antecedents, news media use…) but also cultural values (e.g. post-materialism), and differences in institutions' performance that may better predict trust in institutional actors across countries. Another qualification comes from the use of an online survey. Although in most countries our samples are comparable to the National Census in terms of age, sex, education, and income (see Appendix), participants were not randomly selected from the general population, but from an opt-in panel. Finally, in two cases (South Africa and India), our samples are not representative of the whole country, but only of the most populated city (Johannesburg and Delhi, respectively).

Despite these limitations, this study makes theoretical and empirical contributions to the study of social trust. In brief, we tested a multidimensional model of social trust—which includes trust in government, trust in governing bodies, trust in security institutions, trust in knowledge producers, and trust in the media—across different societies. The model's sub-dimensions were robust across countries, showing more than acceptable reliability estimates in most cases. We also found important differences in social trust in different societies, which we tried to explain (in a post-hoc way) with the help of cultural and institutional theories.

Notes

[1] The Human Development Index (HDI) was created by the United Nations Development Programme (UNDP) as an indicator to show the well-being of a country's people, aside from using economic growth alone as an indicator of how 'well' a country is faring, since a country's economic growth can often come at a great cost of the well-being of its citizens. The HDI indices include life expectancy at birth, expected years of schooling, mean years of schooling, and gross national income (GNI) per capita (UNDP, 2015).

[2] It is important to note that countries with higher levels of Internet penetration are less problematic for web-only designs (Mohorko, Leeuw, Hox, 2013). Therefore, in countries with higher levels of income inequality, results should be interpreted with caution.

7. References

Achterberg, P., de Koster, W. y van der Waal, J. (2015). A science confidence gap: Education, trust in scientific methods, and trust in scientific institutions in the United States, 2014. *Public Understanding of Science*, *26*(6), 704-720. doi: 10.1177/0963662515617367

Allum, N., Sturgis, P., Tabourazi, D. y Brunton-Smith, I. (2008). Science knowledge and attitudes across cultures: a meta-analysis. *Public Understanding of Science, 17*(1), 35-54. doi: 10.1177/0963662506070159

American Association of Public Opinion Research (2011). *Standard definitions: Final dispositions of case codes and outcome rates for surveys.* Recuperado de: http://aapor.org/Content/NavigationMenu/AboutAAPOR/StandardsampEthics/Standardefinitions/StandardDefinitions2011.pdf

Ardèvol-Abreu, A., y Gil de Zúñiga, H. (2016). Effects of editorial media bias perception and media trust on the use of traditional, citizen, and social media news. *Journalism & Mass Communication Quarterly, 94*(3), 703-724. doi: 10.1177/1077699016654684.

Aupers, S. (2012). 'Trust no one': Modernization, paranoia and conspiracy culture. *European Journal of Communication 27*(1): 22-34. doi: 10.1177/0267323111433566
Bauer, M., Durant, J. y Evans, G. (1994). European public perceptions of science. *International Journal of Public Opinion Research, 6*(2), 163-186. doi: 10.1093/ijpor/6.2.163

Behling, O. y Law, K. S. (2000). *Translating questionnaires and other research instruments: problems and solutions*. Thousand Oaks, CA: SAGE.

Bennett, S. E., Rhine, S. L., Flickinger, R. S. y Bennett, L. M. (1999). 'Video malaise' revisited: Public trust in the media and government. *Harvard International Journal of Press/Politics*, 1999, *4*(4), 8-23. doi: 10.1177/1081180X9900400402

Boix, C. y Svolik, M. W. (2013). The foundations of limited authoritarian government: Institutions, commitment, and power-sharing in dictatorships. *The Journal of Politics*, *75*(2), 300-316. doi: 10.1017/S0022381613000029

Bosnjak, M., Das, M. y Lynn, P. (2016). Methods for probability-based online and mixed-mode panels selected: recent trends and future perspectives. *Social Science Computer Review*, *34*(1), 3-7. doi: 10.1177/0894439315579246.

Brislin, R. W. (1980). Translation and content analysis of oral and written materials. In Harry C. Triandis & John W. Berry (Eds.), *Handbook of cross-cultural psychology*: Vol. 2. Methodology (pp. 389-444). Boston, MA: Allyn and Bacon.

Callegaro, M., Baker, R. P., Bethlehem, J., Göritz, A. S., Krosnick, J. A. y Lavrakas, P. J. (Eds.) (2014). *Online panel research: a data quality perspective*. Sussex, UK: John Wiley & Sons.

Catterberg, G. y Moreno, A. (2006). The individual bases of political trust: Trends in new and established democracies. *International Journal of Public Opinion Research, 18*(1), 31-48

Citrin, J. (1974). Comment: the political relevance of trust in government. *American Political Science Review, 68*(3), 973-988. doi: 10.2307/1959141

Coleman, J. S. (1990). *Foundations of social choice theory*. Cambridge, MA: Harvard University Press.

Cook, T. E. y Gronke, P. (2005). The skeptical American: Revisiting the meanings of trust in government and confidence in institutions. *Journal of Politics, 67*(3), 784-803. doi: 10.1111/j.1468-2508.2005.00339.x

Dautrich, K. y Hartley, T. H. (1999). How the news media fail American voters. Causes, consequences, and remedies. New York: Columbia University Press.

Directorate General of Budget, Accounting and Statistics (Executive Yuan, Taiwan) (2016). Composite index and related indicators. Recuperado de http://eng.stat.gov.tw/ct.asp?xItem=25280&ctNode=6032&mp=5

Druckman, J. N. (2001). On the limits of framing: Who can frame? *Journal of Politics, 63*, 1041-1066. doi: 10.1111/0022-3816.00100

Durant, J. R., Evans, G. A. y Thomas, G. P. (1989). The public understanding of science. *Nature, 340*, 11-14. doi:10.1038/340011a0.

Dyck, A. y Zingales, L. (2002). The Corporate Governance Role of the Media, in *The Right to Tell-The Role of Mass Media in Economic Development*, (pp. 101-137). Washington, DC: The World Bank Institute.

Easton, D. (1965). *A systems analysis of political life.* New York: Wiley.

Evans, G. A. y Durant, J. R. (1989). Understanding of science in Britain and the USA. In R. Jowell, S. Witherspoon, & L. Brook (Eds.), *British Social Attitudes, 6th report* (pp. 105-129). Aldershot (Hampshire): Gover.

Farnsworth, S. J. y Lichter, S. R. (2007). *The nightly news nightmare: Television's coverage of US presidential elections, 1988-2004*. Plymouth (UK): Rowman & Littlefield.

Furusten, S. (2013). *Institutional Theory and Organizational Change*: Edward Elgar Publishing, Incorporated.

Gamson, W. A. (1968). *Power and disconnect*. Homewood, IL: Dorsey.
George, D. y Mallery, M. (2003). *Using SPSS for Windows step by step: a simple guide and reference*. Boston, MA: Allyn & Bacon.

Habermas, J. (1989). *The structural transformation of the public sphere*. Cambridge: Polity Press
Hardin, R. (1999). Do we want trust in government? In M. E. Warren (Ed.), *Democracy and trust*, (pp. 22-41). Cambridge: Cambridge University Press.

Harris, V. W., Skogrand, L. y Hatch, D. (2008). Role of friendship, trust, and love in strong latino marriages. *Marriage and Family Review, 44*(4): 455-488. doi:10.1080/01494920802454041

Hetherington, M. J. (1998). The political relevance of political trust. *American Political Science Review, 92*(4), 791-808. doi: 10.2307/2586304

Hetherington, M. J. (1999). The effect of political trust on the presidential vote, 1968-96. *American Political Science Review, 93*(2), 311-326. doi: 10.2307/2585398

Inglehart, R. (1990). *Culture shift in advanced industrial society*. Princeton, NJ: Princeton University Press.

Inglehart, R. (1997). *Modernization and postmodernization: Cultural, economic, and political change in 43 societies.* Princeton, NJ: Princeton University Press.

Jackob, N. G. E. (2010). No alternatives? The relationship between perceived media dependency, use of alternative information sources, and general trust in mass media. *International Journal of Communication, 4*, 18, 589-606.

Jones, D. A. (2004). Why Americans don't trust the media. A preliminary analysis. *The Harvard International Journal of Press/Politics*, 9(2), 60-75. doi: 10.1177/1081180X04263461

Kohring, M. y Matthes, J. (2007). Trust in news media development and validation of a multidimensional scale. *Communication Research, 34*(2), 231-252. doi: 10.1177/0093650206298071

Levi, M. (1998). A state of trust. In V. Braithwaite & M. Levi (Eds.), *Trust and governance* (pp. 77-101). New York: Russell Sage Foundation.

Liu, Milojev, Gil de Zúñiga y Zhang, (2018). The Global Trust Inventory as a 'Proxy Measure' for Social Capital: Measurement and Impact in 11 Democratic Societies. *Journal of Cross-Cultural Psychology*.

Lorenz, E. (1999). Trust, contract and economic cooperation. *Cambridge Journal of Economics, 23*(3): 301-315. doi: 10.1093/cje/23.3.301

Luhmann, N. (2000). Familiarity, confidence, trust: problems and alternatives. In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations* (pp. 94-107). Oxford: Basil Blackwell

Miller, A. H. (1974). Rejoinder to 'Comment' by Jack Citrin: political discontent or ritualism? *American Political Science Review, 68*, 989-1001.

Miller, J. D. (1983): Scientific literacy: a conceptual and empirical review. *Daedalus, 112*(2), 29-48.

Miller, J. M. y Krosnick, J. A. (2000). News media impact on the ingredients of presidential evaluations: Politically knowledgeable citizens are guided by a trusted source. *American Journal of Political Science*, 44(2), 301-315. doi: 10.2307/2669312

Millstone, E. y van Zwanenberg, P. (2000). A crisis of trust: for science, scientists or for institutions? *Nature Medicine, 6*(12), 1307-1308. doi:10.1038/82102

Mohorko, A., Leeuw, E. D. y Hox, J. (2013). Internet coverage and coverage bias in Europe: Developments across countries and over time. *Journal of Official Statistics, 29*(4), 609-622. doi: 10.2478/jos-2013-0042.

Moy, P., McCluskey, M. R., McCoy, K. y Spratt, M. A. (2004). Political correlates of local news media use. *Journal of Communication, 54(*3), 532-546. doi: 10.1111/j.1460-2466. 2004.tb02643.x

Pardo, R. y Calvo, F. (2002). Attitudes toward science among the European public: a methodological analysis. *Public Understanding of Science, 11*(2), 155-195. doi: 10.1088/0963-6625/11/2/305

Putnam, R. (2000). *Bowling alone: the collapse and revival of American community*. New York: Simon & Schuster.

Putnam, R. (Ed.) (2002). *Democracies in flux. The evolution of social capital in contemporary society*. Oxford: Oxford University Press.

Schudson, M. (1978). *Discovering the news*. New York: Basic Books.

Sibley, C. G. y Liu, J. H. (2013). Relocating attitudes as components of representational profiles: Mapping the epidemiology of bicultural policy attitudes using Latent Class Analysis. *European Journal of Social Psychology, 43*, 160-174.

Thato, S., Hanna, K. M. y Rodcumdee, B. (2005). Translation and validation of the condom self-efficacy scale with Thai adolescents and young adults. *Journal of Nursing Scholarship, 37*(1), 36-40. doi: 10.1111/j.1547-5069.2005. 00012.x

Tsfati, Y. (2003). Does audience skepticism of the media matter in agenda setting? *Journal of Broadcasting & Electronic Media, 47*(2), 157-176.

Tsfati, Y. (2010). Online news exposure and trust in the mainstream media: Exploring possible associations. *American Behavioral Scientist, 54*(1), 22-42. doi: 10.1177/0002764210376309

Tsfati, Y. y Ariely, G. (2014). Individual and Contextual Correlates of Trust in Media Across 44 Countries. *Communication Research, 41*(6), 760-782.

Tsfati, Y. y Cappella, J. N. (2003). Do people watch what they do not trust? Exploring the association between news media skepticism and exposure. *Communication Research, 30*(5), 504-529.

Programa de las Naciones Unidas para el Desarrollo (PNUD) (2015). *Human development report. Work for human development.* Recuperado de http://hdr.undp.org/sites/default/files/2015_human_development_report_1.pdf

Ziman, J. (1991). Public understanding of science. *Science, Technology and Human Values, 16*, (1), 99-105. doi: 10.1177/016224399101600106

Ziman, J. (1992). Not knowing, needing to know, and wanting to know. In B. V. Lewenstein (Ed.), *When science meets the public* (pp. 13-20). Washington, DC: American Association for the Advancement of Science.

Tables

Table 1

Comparison of Clusters of Countries Based on their Human Development Index (HDI), Sizes and Means for Evaluation Fields

Cluster #	1 (*N* = 10)	2 (*N* = 4)	3 (*N* = 4)	4 (*N* = 4)
Mean HDI	.89	.83	.75	.66
Proportional Size	45.5%	18.2%	18.2%	18.2%
Evaluation fields				
Trust in the Government	2.88	2.72	2.84	3.47
Trust in Governing Bodies	3.38	2.89	2.90	3.66
Trust in Security Institutions	4.02	3.54	3.68	3.89
Trust in Knowledge Producers	4.32	4.50	4.45	4.72
Trust in the Media	3.33	3.56	3.57	4.14

Table 2

Analysis of Variance (One-Way ANOVA) for Testing Differences in Trust Levels Between Countries According to their Human Development Index

HDI	Government Trust	Trust in Governing Bodies	Trust in Security Institutions	Trust in Knowledge Producers	Trust in the Media
Highest (1-25)	$F(9, 10414) = 106.96$***	$F(9, 10289) = 130.95$***	$F(9, 10376) = 144.79$***	$F(9, 10496) = 158.97$***	$F(9, 10483) = 105.00$***
Very High (25-49)	$F(3, 4234) = 132.29$***	$F(3, 4132) = 24.98$***	$F(3, 4173) = 83.04$***	$F(3, 4266) = 98.35$***	$F(3, 4283) = 55.07$***
High (50-105)	$F(3, 4181) = 475.27$***	$F(3, 4121) = 199.42$***	$F(3, 4148) = 252.31$***	$F(3, 4218) = 17.60$***	$F(3, 4247) = 34.09$***
Medium (106-130)	$F(3, 2767) = 338.36$***	$F(3, 2745) = 205.67$***	$F(3, 2801) = 209.79$***	$F(3, 2792) = 88.29$***	$F(3, 2814) = 169.48$***

Notes. Countries have been grouped according to their scores on the Human Development Index (United Nations, 2015). Highest (1-25) comprises Germany, United States, New Zealand, United Kingdom, Korea, Japan, Taiwan, Spain, Italy, and Estonia. Very High (25-49) comprises Poland, Argentina, Chile, and Russia. High (50-105) comprises Turkey, Brazil, Ukraine, and China. Medium (106-130) comprises Indonesia, Philippines, South Africa, and India

Table 3

Descriptive and Reliability Statistics for Dimensions of Trust

	Government Trust			Trust Gov. Bodies			Trust Sec. Instit.			Trust Knowledge Prod.			Media Trust			
	M	*SD*	α	*M*	*SD*	α	*M*	*SD*	α	*M*	*SD*	α	*M*	*SD*	α	N
All	2.92	1.44	.87	3.21	1.41	.88	3.84	1.54	.74	4.43	1.42	.87	3.51	1.12	.77	21,781
Highest																
Germany	3.20	1.51	.94	3.58	1.34	.83	3.98	1.48	.80	4.42	1.41	.92	3.45	1.12	.68	1,045
United States	2.96	1.31	.80	3.29	1.29	.85	4.49	1.44	.77	4.32	1.56	.86	3.03	1.09	.72	1,152
New Zealand	3.19	1.35	.85	3.97	1.32	.86	4.65	1.34	.74	4.59	1.28	.86	3.21	1.01	.71	1,149
United Kingdom	2.94	1.43	.91	3.66	1.41	.87	4.20	1.44	.69	4.44	1.33	.89	3.04	1.13	.73	1,058
Korea (South)	2.86	1.47	.89	3.02	1.34	.89	3.48	1.40	.74	3.80	1.27	.79	3.58	1.09	.80	921
Japan	2.90	1.16	.88	3.37	1.17	.88	3.81	1.28	.76	3.73	1.22	.92	3.33	0.95	.81	968
*Taiwan	2.37	1.13	.88	2.79	1.21	.91	3.01	1.24	.72	3.41	1.33	.84	2.63	1.02	.86	994
Spain	2.31	1.20	.85	3.03	1.31	.84	3.88	1.56	.78	4.88	1.41	.88	3.64	0.98	.70	1,009
Italy	2.41	1.33	.90	2.99	1.35	.87	4.02	1.62	.87	4.52	1.47	.86	3.68	1.09	.76	1,031
Estonia	3.62	1.17	.78	4.13	1.32	.88	4.69	1.24	.76	5.06	1.08	.88	3.61	0.86	.67	1,158
Very High																
Poland	2.41	1.28	.88	2.98	1.32	.86	3.68	1.42	.73	4.14	1.43	.91	3.40	1.11	.77	1,052
Argentina	2.42	1.36	.83	2.59	1.24	.82	2.99	1.37	.69	5.11	1.37	.87	3.63	0.97	.71	1,139
Chile	2.66	1.23	.81	2.95	1.30	.82	3.97	1.56	.71	4.37	1.42	.80	3.86	0.97	.63	959
Russia	3.41	1.46	.86	3.03	1.42	.89	3.51	1.49	.69	4.38	1.45	.89	3.36	1.12	.79	1,131
High																
Turkey	3.02	1.56	.88	3.12	1.57	.88	4.47	1.70	.73	4.72	1.46	.80	3.25	1.16	.76	938
Brazil	1.88	1.21	.88	2.54	1.28	.83	3.00	1.49	.70	4.27	1.60	.87	3.62	1.23	.79	1,083
Ukraine	2.43	1.26	.87	2.30	1.17	.88	3.07	1.40	.59	4.46	1.31	.87	3.72	1.06	.77	1,202
China	4.05	1.43	.87	3.63	1.46	.94	4.17	1.45	.78	4.37	1.36	.84	3.67	1.22	.84	997

Medium															
Indonesia	3.50	1.26	.86	3.31	1.26	.91	3.81	1.25	.64	4.61	1.22	.86	3.84	0.98	.85	1,057
Philippines	3.43	1.22	.86	3.45	1.18	.88	3.65	1.35	--	4.57	1.22	.84	4.05	1.00	.80	1,032
South Africa (Joh.)	2.00	0.93	.64	2.86	1.24	.81	2.85	1.26	.73	4.10	1.45	.83	3.54	1.07	.75	381
India (Delhi)	4.93	1.32	.83	5.03	1.26	.87	5.25	1.11	.24	5.60	1.18	.81	5.13	1.09	.81	325

Notes. Countries have been grouped according to their scores on the Human Development Index (United Nations, 2015). * Not a member of the UN: 2015 HDI calculated by the Taiwanese government (Directorate General of Budget, Accounting and Statistics, 2016). All items measured on 7-point scales, from 1 = 'do not trust at all' to 7 = 'trust completely'. The index for trust in security institutions in Philippines was created with 1 variable instead of 2, since the question about the respondents' levels of trust in the military was not asked in this country.

Table 4

T-tests for differences between countries for each dimension of trust and overall (grand) means

	Government Trust			Trust Gov. Bodies			Trust Sec. Instit.			Trust Knowledge Prod.			Media Trust			
	$m_{country}$	$m_{country}$ - M	*Sig*	$m_{country}$	$m_{country}$ - M	*Sig*	$m_{country}$	$m_{country}$ - M	*Sig*	$m_{country}$	$m_{country}$ - M	*Sig*	$m_{country}$	$m_{country}$ - M	*Sig*	
Highest																
Germany	3.20	0.286	+	3.58	0.380	+	3.98	0.135		4.42	-0.010		3.45	-0.060		
United States	2.96	0.046		3.29	0.083		4.49	0.652	+	4.32	-0.111		3.03	-0.474	-	
New Zealand	3.19	0.278	+	3.97	0.761	+	4.65	0.812	+	4.59	0.160	+	3.21	-0.301	-	
United Kingdom	2.94	0.025		3.66	0.451	+	4.20	0.356	+	4.44	0.003		3.04	-0.360	-	
Korea (South)	2.86	-0.057		3.02	-0.189	-	3.48	-0.357	-	3.80	-0.631	-	3.58	0.069		
Japan	2.90	-0.015		3.37	0.162	+	3.81	-0.029		3.73	-0.703	-	3.33	-0.178	-	
*Taiwan	2.37	-0.909	-	2.79	-0.514	-	3.01	-0.834	-	3.41	-1.018	-	2.63	-0.876	-	

Spain	2.31	-0.604	-	3.03	-0.172	-	3.88	0.041		4.88	0.450	+	3.64	0.126	+
Italy	2.41	-0.502	+	2.99	-0.220	+	4.02	0.188		4.52	0.084		3.68	0.165	+
Estonia	3.62	0.700	+	4.13	0.924	+	4.69	0.845	+	5.06	0.627	+	3.61	0.102	+
Very High															
Poland	2.41	-0.507	-	2.98	-0.221	-	3.68	-0.166	-	4.14	-0.296	-	3.40	-0.114	-
Argentina	2.42	-0.495	-	2.59	-0.612	-	2.99	-0.850	-	5.11	0.677	+	3.63	0.117	+
Chile	2.66	-0.255	-	2.95	-0.253	-	3.97	0.136		4.37	-0.066		3.86	0.350	+
Russia	3.41	0.489	+	3.03	-0.173	-	3.51	-0.366	-	4.38	0.051		3.36	-0.150	-
High															
Turkey	3.02	0.101		3.12	-0.091		4.47	0.624	+	4.72	0.282	+	3.25	-0.265	-
Brazil	1.88	-1.031	-	2.54	-0.666	-	3.00	-0.837	-	4.27	-0.163	-	3.62	0.103	+
Ukraine	2.43	-0.479	-	2.30	-0.903	-	3.07	-0.767	-	4.46	0.030		3.72	0.208	+
China	4.05	1.14	+	3.63	0.423	+	4.17	0.331	+	4.37	-0.066		3.67	0.157	+
Medium															
Indonesia	3.50	0.584	+	3.31	0.103		3.81	-0.032		4.61	0.173	+	3.84	0.330	+
Philippines	3.43	0.515	+	3.45	0.249	+	3.65	-0.193	-	4.57	0.134	+	4.05	0.540	+
South Africa (Joh.)	2.00	-0.909	-	2.86	-0.343	-	2.85	-0.990	-	4.10	-0.331	-	3.54	0.030	
India (Delhi)	4.93	2.017	+	5.03	1.824	+	5.25	1.404	+	5.60	1.166	+	5.13	1.617	+

Notes. Countries have been grouped according to their scores on the Human Development Index (United Nations, 2015). * Not a member of the UN: 2015 HDI calculated by the Taiwanese government (Directorate General of Budget, Accounting and Statistics, 2016). The index for trust in security institutions in Philippines was created with 1 variable instead of 2, since the question about the respondents' levels of trust in the military was not asked in this country. Bonferroni-corrected p-values for 22 comparisons (two-tailed). +: Mean value significantly higher that the grand mean at the level $p < .05$ or better. -: Mean value significantly lower that the grand mean at the level $p < .05$ or better. N = 21,781.

Table 5
Post-hoc Comparisons for Between-Groups Differences for Each Dimension of Trust.

	Government Trust			Trust Gov. Bodies			Trust Sec. Instit.			Trust Knowedge Prod.			Media Trust		
	$m_{country}$	*Higher than*[1]	*Lower than*[1]	$m_{country}$	*Higher than*[1]	*Lower than*[1]	$m_{country}$	*Higher than*[1]	*Lower than*[1]	$m_{country}$	*Higher than*[1]	*Lower than*[1]	$m_{country}$	*Higher than*[1]	*Lower than*[1]
Highest															
Germany (g)	3.20	u e k j t s i	o	3.58	u k j t s i	n o	3.98	k t	u n e o	4.42	u k j t	s o	3.45	u n e t	s i o
United States (u)	2.96	t s i	g n o	3.29	k t s i	g n e o	4.49	g e k j t s i	o	4.32	k j t	n e i o	3.03	t	(*all but* t)
New Zealand (n)	3.19	u e k j t s i	o	3.97	g i j k s t e u	(*none*)	4.65	g e k j t s i	(*none*)	4.59	u k j t	s o	3.21	u t	g k s i o
U. K. (e)	2.94	t s i	g n o	3.66	u k j t s i	n o	4.20	g k j t s	u n o	4.44	k j t	s o	3.04	t	g k j s i o
Korea (k)	2.86	t s i	g n o	3.02	t	g n e j o	3.48	t	(*all but t*)	3.80	t	g u n e s i o	3.58	u n e j t	(*none*)
Japan (j)	2.90	t s i	g n o	3.37	k t s i	g n e o	3.81	k t	u n e i o	3.73	t	g u n e s i o	3.33	u e t	k s i o
*Taiwan (t)	2.37	(*none*)	g u n e k j o	2.79	(*none*)	(*all*)	3.01	(*none*)	(*all*)	3.41	(*none*)	(*all*)	2.63	(*none*)	(*all*)
Spain (s)	2.31	(*none*)	g u n e k j o	3.03	t	g u n e j o	3.88	k t	u n e o	4.88	(*all but* o)	(*none*)	3.64	g u n e j t	(*none*)
Italy (i)	2.41	(*none*)	g u n e k j o	2.99	t	g u n e j o	4.02	k t	u n o	4.52	u k j t	s o	3.68	g u n e j t	(*none*)
Estonia (o)	3.62	(*all*)	(*none*)	4.13	g u e k j t s i	(*none*)	4.69	(*all but* n)	(*none*)	5.06	(*all but* s)	(*none*)	3.61	g u n e j t	(*none*)
Very High															
Poland (p)	2.41	(*none*)	c r	2.98	a	(*none*)	3.68	a r	c	4.14	(*none*)	(*all*)	3.40	(*none*)	a c
Argentina (a)	2.42	(*none*)	c r	2.59	(*none*)	(*all*)	2.99	(*none*)	(*all*)	5.11	(*all*)	(*none*)	3.63	p r	c
Chile (c)	2.66	p a	r	2.95	a	(*none*)	3.97	(*all*)	(*none*)	4.37	p	a	3.86	(*all*)	(*none*)
Russia (r)	3.41	(*all*)	(*none*)	3.03	a	(*none*)	3.51	a	p c	4.38	p	a	3.36	(*none*)	a c
High															
Turkey (y)	3.02	b x	h	3.12	b x	h	4.47	(*all*)	(*none*)	4.72	(*all*)	(*none*)	3.25	(*none*)	(*all*)
Brazil (b)	1.88	(*none*)	(*all*)	2.54	x	y h	3.00	(*none*)	y h	4.27	(*none*)	y x	3.62	y	(*none*)
Ukraine (x)	2.43	b	y h	2.30	(*none*)	(*all*)	3.07	(*none*)	y h	4.46	b	y	3.72	y	(*none*)
China (h)	4.05	(*all*)	(*none*)	3.63	(*all*)	(*none*)	4.17	b x	y	4.37	(*none*)	y	3.67	y	(*none*)

Medium															
Indonesia (y)	3.50	f	d	3.31	f	l d	3.81	l f	d	4.61	f	d	3.84	f	l d
Philippines (l)	3.43	f	d	3.45	y f	d	3.65	f	y d	4.57	f	d	4.05	y f	d
South Africa (f)	2.00	(*none*)	(*all*)	2.86	(*none*)	(*all*)	2.85	(*none*)	(*all*)	4.10	(*none*)	(*all*)	3.54	(*none*)	(*all*)
India (d)	4.93	(*all*)	(*none*)	5.03	(*all*)	(*none*)	5.25	(*all*)	(*none*)	5.60	(*all*)	(*none*)	5.13	(*all*)	(*none*)

Notes. Countries have been grouped according to their scores on the Human Development Index (United Nations, 2015). * Not a member of the UN: 2015 HDI calculated by the Taiwanese government (Directorate General of Budget, Accounting and Statistics, 2016). (1) Post-hoc Bonferroni adjusted comparisons between-group. Subscripts indicate mean values significantly different at the level $p < .05$ or better. $N = 21{,}781$.

Appendix for Data Collection Demographics

Table 6

*Demographic Breakdown by Age, Gender and Race for 22 Country Study versus Census Data**

		Age Group					Gender		Race		
		18-24	25-34	35-44	45-64	65+	Female	Male	Asian	Black	White
1.	Argentina	15.2(17.3)	24(21.4)	20.8(17.6)	34.2(28.4)	5.8(15.3)	51.7(53.1)	48.3(46.9)	--	--	71.7
2.	Brazil	5.7(8.7)	29.4(15.7)	29.4(15.7)	20(13.5)	3.7(13)	49.8(51.4)	50.2(48.6)	1.7(.5)	12.6(7.9)	68.1(46.2)
3.	Chile	26.3(14.8)	30(21.1)	19.7(18.4)	20.7(32.1)	3.2(13.7)	51.3 (51)	48.7 (49)	--	--	--
4.	China	10.5(12.7)	31.5(14.9)	27.9(18.2)	27.2(24.3)	2.9(8.9)	44.4(48.8)	55.6(51.2)	--	--	--
5.	Estonia	11.1(9.7)	17.8(17.9)	15.1(17)	33(32.4)	22(23)	54.3(48.2)	50.6(45.7)	--	--	97.8(68.2)
6.	Germany	11(6.2)	26(15)	43.8(24.6)	8.3(5.1)	10.9(17)	53.9(51)	46.1(49)	--	--	--

7.	India	17.6(21.8)	41.5(27.6)	26.5(21.5)	14.1(22.9)	.3(6)	38(46.4)	62(53.5)	--	--	--
8.	Indonesia	19.1(12.5)	36.9(24.3)	26.2(21)	13(24.2)	.6(4.8)	59.6(49.9)	38.9(50.1)	76.2(40.2)		
9.	Italy	10.9(7.1)	21.9(11.5)	27.9(15.1)	34.4(28.7)	5(21.9)	54.8(51.5)	44.2(48.5)	--	--	--
10.	Japan	4.1(5.9)	13.4(13.9)	26.7(17.8)	45(32)	10.9(30)	41.6(51.3)	57.1(48.7)	99.3(98.6)		
11.	Korea	16.7(11.5)	24.4(16.1)	24.3(19.6)	31.7(36.8)	2.8(15.9)	46.7(46.2)	53.3(53.8)	--	--	--
12.	N. Zealand	7.1(9.4)	13.2(16.6)	15.2(18.6)	36.7(35.5)	24(19.7)	56(52.1)	43.2(47.8)	7.8(11.6)	--	77(75.1)
13.	Philippines	17.7(9.2)	35.3(16.1)	25.9(12.4)	15.8(15.9)	1.3(4.8)	49.7(61.2)	39(50.2)	--	--	--
14.	Poland	13.9(10.7)	21.4(19.6)	22.6(18.1)	34.1(33)	8(18.6)	54(52.3)	46(47.7)	--	--	--
15.	Russia	18(13.6)	24.2(19.7)	26(16.6)	28.6(34.3)	2.5(15.6)	50.2(53.8)	48.4(46.2)	--	--	--
16.	S. Africa	10.2(10.4)	31.5(17.6)	23.5(12.4)	28.4(15.6)	2.9(5.3)	61.2(51.3)	37.2(48.7)	--	15(88.1)	45.8(8.9)
17.	Spain	11.7(7.4)	21.9(14.9)	26.4(16.9)	36.8(25.6)	2.9(17.3)	51.7(50.6)	46.5(49.3)	--	--	--
18.	Taiwan	15.4(15.5)	30.6(17.7)	30.6(18.7)	22.6(34.1)	1(13.9)	49.2(50.1)	50.8(49.9)	--	--	--
19.	Turkey										
20.	UK	4.3(8.7)	12.8(17.7)	17.6(16.9)	42.7(33.4)	22.6(23)	54.1(51.4)	45.9(48.6)	3.1(6.9)	1.2(2.9)	91.9(87.6)
22.	Ukraine	13(7.8)	38.6(19.8)	26.6(17.5)	14.8(25.5)	1(19)	44(54.8)	54.9(45.1)	--	--	86.1(83)
22.	US	8.4(9.9)	13.5(13.6)	14.8(12.8)	42.7(26.2)	20(15.5)	59.5(50.8)	40.5(49.2)	3.5(5)	5.8(12.6)	83.3(73.8)

**Note: Census data reported in parenthesis, based on official estimates. Dashes indicate demographics not directly comparable. See below for notes.*

Table 7

*Demographic Breakdown by Education, Homeownership and Marital Status for 22 Country Study versus Census Data**

		Education				Homeownership		Marital Status			
		High School or less	Some College	College Degree+	Graduate Degree+	Own	Rent	Married	Divorced	Single	Widowed
1.	Argentina	54(85)	13.1(9.4)	26.7(5.7)	--	--	--	53.2(52.8)	12.2(10.6)	32.4(28)	2.2(8.5)
2.	Brazil	52.2(39.4)	47.8(60.5)	--	--	--	--	--	--	--	--
3.	Chile	22.8(80.6)	44.2(12)	33(16.6)	--	62.1(80.6)	37.9(19.4)	44.7(44.3)	8.3(3.1)	46.3(47.2)	.7(5.4)
4.	China	9.3(15)	23(5.5)	58.7(3.7)	7.6(.3)	88.9(85.4)	11.1(11.9)	76.2(71.3)	1.4(1.4)	21.8(21.6)	.6(5.7)
5.	Estonia	44.6(64)	16.5(9.4)	14.5(7.8)	24.2(17.2)	--	-	--	--	--	--
6.	Germany	60.9(85.3)	--	7.2(1.3)	31.8(14.5)	44.1(41.3)	55.9(48.6)	54.5(54.8)	19.5(8.5)	21.4(28.2)	4.6(8.5)
7.	India	6.5(75.4)	4.3(10.6)	89.2(16.8)	--	--	--	72.3(50.42)	3.7(.3)	24(49.2)	--
8.	Indonesia	25.7(41.6)	13.1(29.2)	53.9(18.2)	4.7(10.9)	--	--	--	--	--	--
9.	Italy	52(49.7)	--	31.2(13.5)	--	79.3(72)	20.7(18)	56(48.4)	5.1(2.2)	37.5(41.9)	1.4(7.5)
10.	Japan	44.3(62.3)	14.4(16.4)	33.9(19.5)	7.4(1.8)	--	--	--	--	--	--
11.	Korea	31.8(56.5)	11.6(14.3)	56.6(29.3)	--	59.4(53.8)	40.6(46.2)	51.5(60.8)	2.5(4.2)	45(26.9)	--
12.	N. Zealand	33.5(38.2)	28.3(8.2)	24.4(12.1)	13.7(5.7)	--	--	--	--	--	--
13.	Philippines	5.5(7.1)	--	70.2(3.5)	--	66(61.6)	34(12.1)	50.3(45.3)	4.3(1.2)	43.2(43.5)	2.2(4.2)
14.	Poland	48.8(79.4)	15.4(7.6)	35.8(13)	--	80.5(83.5)	19.5(16.5)	67(57.7)	7.5(5)	22(27.8)	3.5(9.5)

15.	Russia	25.4(64)	10.6(4.2)	63.9(30.9)	3.5(1)	--	--	56.2(49.7)	6.3(8.3)	18.4(20.7)	--
16.	S. Africa	32.6(87.6)	--	45.3(12.1)	--	--	--	--	--	--	--
17.	Spain	18.6(46)	44.1(22.1)	37(31.9)	--	77.7(79.7)	21.4(20.3)	62.4(54.6)	6.4(5.2)	29.6(32.4)	1.3(7.6)
18.	Taiwan	21.9(57)	18.2(12.2)	46.1(24.6)	13.8(6.3)	70.1(84)	29.9(16)	41.6(51.1)	4(7.9)	50.6(34.7)	.3(6.3)
19.	Turkey										
20.	UK	30.2(29.3)	31.9(20.5)	38(27)	--	65.1(64.8)	35.2(34.8)	48.5(41.5)	11.6(6.6)	31.7(46.4)	3.7(5.2)
22.	Ukraine	13.7(56.5)	--	31(20.7)	61.7(14.6)	--	--	--	--	--	--
22.	US	22.8(40.8)	33.5(29.1)	28.3(18.7)	15.4(11.4)	67.9(63.1)	32.1(36.9)	50.9(47.7)	12.9(11)	33.3(27)	(5.9)5.9

**Note: Census data reported in parenthesis, based on official estimates. Dashes indicate demographics not directly comparable. See below for notes.*

8. Appendix

Footnotes on Demographic Breakdown of Country Studies

1.	Argentina	2014 World Values Survey. Other Race = Mestizo. Yearly income reported versus Pew 2013: $19,999 or less 73.3(31.7); 20,000 – 49,000 21.3(40.3); 50,000-99,000 4.8(19); 100,000 or more .6(9).
2.	Brazil	2013 Brazilian Census data. Numbers for age groups 15-19, 20-29, 30-39, 40-49, 50-59, and 60+. *Census numbers for Brown/Indigenous (45.3%) categories were not recorded in the first wave, and were instead asked in the study as Latino (7.8%); Other = American and Pacific Islander. Language in the census differs from the study on race and education items: High School = High School or less, Some College = High School +. The Brazilian Census the information available is related to the level that people are studying at the moment. Yearly income categories reported as: less than R$50,000 52.1(79.6); R$50, 000-100,000 16.3(6.2); R$100,000+ 13.2(3.1).
3.	Chile	2015 population estimates based on INE data.
4.	China	2010 Chinese Census made by China's Office for National Statistics.
5.	Estonia	2015 population estimates for age and gender; 2011 for ethnicity and citizenship, 2014 for education levels. White = Estonian (official estimates report Russian as 26.1% versus 1% in the study.
6.	Germany	2014 Satista estimates. Age categories are 18-24, 25-39, 40-59, 60-64, and 65+.
7.	India	2011 Delhi population estimates. Some College = 12-year Intermediate education.
8.	Indonesia	2010 BPS estimates. Asian = Java
9.	Italy	2015 ISTAT estimates.
10.	Japan	2010-2014 Japanese Census Estimates. Asian = Japanese; Other = Korean, Chinese, or Other. Yearly income categories reported as: 1.5 million yen or less 13.3(10.6); 1.5-3.5 million 28.5(24.3); 3.5-7 million 31.7(38); 7-11 million 18(17.8); over 11 million 8.3(9.3).
11.	Korea	2015 population statistics from 2015 resident registration at the Ministry of Government Administration and Home Affairs; 2012 Korea Housing Survey; and 2010 census.
12.	New Zealand	2013 NZ census. In age groups 18- 24 = 20-24. White= European; Other = Maori 4.8(12) and Pacific 1.5(5.7). Yearly income categories reported as: $50,000 or less 41.7(32.9); 50,001-150,000 34.7(40.97); over 150,000 2.8(10.1).
13.	Philippines	2015 population estimates. In age groups 18- 24 = 20-24.
14.	Poland	Population estimates for 2011 and 2014 by GUS or Eurostat 2012.
15.	Russia	2010 census estimates.

16.	South Africa	2011 Census in Brief (Statistics South Africa) and Household Income and Expenditure Patterns in South Africa, 2011 (UNISA). Yearly income categories reported as: Poor (R0-R54,344) 12.2(9.9); Low middle class (R54,345-R151,727) 13(18.7); Emerging middle class (R151,278-R363,930) 30.2(22.4); Realized middle class 14.3(17.7); Upper middle class 4.7(10.7); Emerging affluent or Affluent 5.5(20.6).
17.	Spain	2011 Population Census made by the Spanish Statistical Office (INE); 2011 European Union Statistics in Income and Living Conditions (EU-SILC); 2011 Labor Force Survey (EPA).
18.	Taiwan	2014 Department of Statistics, Ministry of Interior.
19.	Turkey	
20.	UK	2014 UK Census (ONS) estimates for age, homeownership and marital status, otherwise 2011 Census data is used.
21.	Ukraine	2001 Official census data. White = Ukrainian; Russian = 10.9(17.3).
22.	US	2014 U.S. Census American Community Survey (1-Year Estimates); Census asks about Hispanic (16.9%) ethnicity in a separate question, the study offered Latino (5.1%) as an exclusive option in a single race item.

Census data reported in parenthesis, based on official estimates. Dashes indicate demographics not directly comparable.

How to cite this article in bibliographies / References

H Gil de Zúñiga, A Ardèvol-Abreu, T Diehl, M Gómez Patiño, J H Liu (2019): "Trust in Institutional Actors across 22 Countries Examining Political, Science, and Media Trust Around the World". *Revista Latina de Comunicación Social*, 74, pp. 237 to 262.
http://www.revistalatinacs.org/074paper/1329/12en.html
DOI: 10.4185/RLCS-2019-1329en

Article received on 30 November 2018. Accepted on 21 January.
Published on 12 February 2019